

ABSTRACT OF THE DISCLOSURE

In a multiple access control system with intelligent bandwidth allocation for wireless ATM networks, an intelligent bandwidth allocator is provided for statically allocating reservation type bandwidth and dynamically allocating contention type bandwidth to the mobile terminal. A traffic estimator/predicator is provided for predicting the CNF value of a subsequent frame by the CNF value of at least one frame, and determining the number of the SCR slots and ABR slots to be allocated. A multiple access controller is used for providing the reservation type bandwidth with a multiple access function in a reservation access manner, and providing the contention type bandwidth with a multiple access function in a contention access manner.